

3.2.3 Difficult Run Summary

3.2.3.1 Difficult Run Watershed

Description. Difficult Run Watershed is the largest watershed in Fairfax County, with just over 131 miles of stream assessed. It encompasses most of the northern portion of the County. The watershed is contained entirely within the county boundaries, and drains directly to the Potomac River.

Habitat. The habitat assessment results for Difficult Run Watershed are summarized by stream in Table 3-13. Habitat scores for each reach are depicted in Figure 3-17. Based on a length weighted habitat score of 108 (Table 3-2), Difficult Run Watershed is in the middle to upper range of quality, compared to the rest of the County. Approximately 2 miles of stream were categorized as having “very poor” habitat conditions, 44 miles as “poor,” 62 miles as “fair,” 21 miles as “good,” and 1 mile as “excellent.”

CEM. On the basis of the CEM evaluations, approximately 73 percent of Difficult Run Watershed is in Evolutionary Stage 3 (Table 3-3). Figure 3-18 summarizes the CEM results for Difficult Run Watershed.

Infrastructure. The infrastructure inventory resulted in 1814 inventory points. The most significant problems were related to three exposed utility lines that were given an impact score over 10 and many obstructions, and erosion points which were each given an impact score of 10. The infrastructure inventory results are summarized in Table 3-14. Figures 3-19, 3-20, 3-21, 3-22, and 3-23 summarize impact scores for the erosion problems; deficient buffers; pipes/ditches; crossings; and dumps, obstructions, and utilities, respectively.

TABLE 3-13
Habitat Assessment Summary for Difficult Run Watershed
Fairfax County Stream Physical Assessment

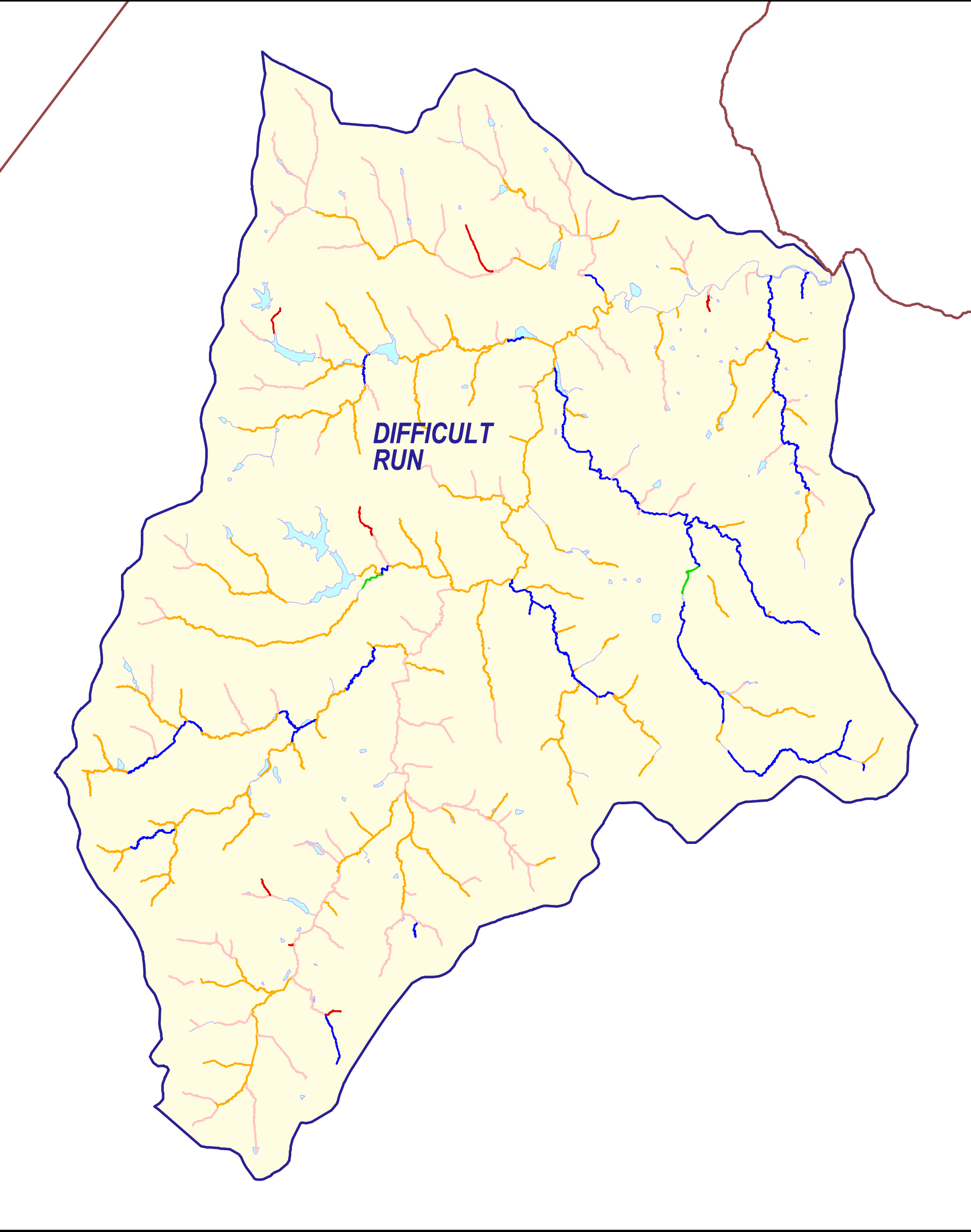
Stream	Linear Feet (Percent) of Stream					Total
	Very Poor	Poor	Fair	Good	Excellent	
Angelico Branch	0 (0.00)	2,569 (24.07)	8,103 (75.93)	0 (0.00)	0 (0.00)	10,672
Bridge Branch	0 (0.00)	0 (0.00)	1,524 (100.00)	0 (0.00)	0 (0.00)	1,524
Captain Hickory Run	0 (0.00)	14,555 (69.77)	4,838 (23.19)	1,468 (7.04)	0 (0.00)	20,861
Colvin Run	0 (0.00)	7,208 (14.61)	38,812 (78.65)	3,327 (6.74)	0 (0.00)	49,348
Difficult Run	3,146 (1.93)	83,235 (51.02)	72,095 (44.19)	4,658 (2.86)	0 (0.00)	163,134
Dog Run	0 (0.00)	7,339 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	7,339
Little Difficult Run	0 (0.00)	10,043 (18.76)	29,185 (54.51)	14,308 (26.73)	0 (0.00)	53,536

TABLE 3-13
Habitat Assessment Summary for Difficult Run Watershed
Fairfax County Stream Physical Assessment

Stream	Linear Feet (Percent) of Stream					Total
	Very Poor	Poor	Fair	Good	Excellent	
Moonac Creek	0 (0.00)	0 (0.00)	2,977 (100.00)	0 (0.00)	0 (0.00)	2,977
Old Courthouse Spring Branch	0 (0.00)	0 (0.00)	338 (2.53)	13,023 (97.47)	0 (0.00)	13,361
Piney Branch	0 (0.00)	0 (0.00)	23,611 (65.67)	12,342 (34.33)	0 (0.00)	35,953
Piney Run	3,138 (7.53)	26,583 (63.77)	11,968 (28.71)	0 (0.00)	0 (0.00)	41,689
Rocky Branch	0 (0.00)	26,699 (58.54)	17,863 (39.17)	1,044 (2.29)	0 (0.00)	45,606
Rocky Run	0 (0.00)	4,552 (14.69)	10,701 (34.53)	15,734 (50.78)	0 (0.00)	30,987
Sharpers Run	0 (0.00)	0 (0.00)	8,224 (100.00)	0 (0.00)	0 (0.00)	8,224
Snakeden Branch	2,090 (6.03)	6,388 (18.44)	25,172 (72.68)	984 (2.84)	0 (0.00)	34,634
South Fork Run	0 (0.00)	0 (0.00)	30,989 (85.96)	5,063 (14.04)	0 (0.00)	36,052
The Glade	0 (0.00)	3,629 (18.67)	14,190 (73.02)	0 (0.00)	1,616 (8.31)	19,434
Tributary To Captain Hickory Run	0 (0.00)	11,160 (84.85)	1,992 (15.15)	0 (0.00)	0 (0.00)	13,151
Tributary To Colvin Run	1,546 (8.04)	8,423 (43.82)	9,252 (48.14)	0 (0.00)	0 (0.00)	19,222
Tributary To Difficult Run	290 (2.67)	8,503 (78.27)	2,070 (19.05)	0 (0.00)	0 (0.00)	10,863
Tributary To Dog Run	0 (0.00)	3,979 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	3,979
Tributary To Piney Branch	0 (0.00)	0 (0.00)	1,954 (100.00)	0 (0.00)	0 (0.00)	1,954
Tributary To Rock Branch	0 (0.00)	1,657 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	1,657
Wolftrap Creek	0 (0.00)	7,142 (12.17)	9,872 (16.83)	39,532 (67.39)	2,119 (3.61)	58,666
Watershed Total	10,211 (1.49)	233,665 (34.12)	325,731 (47.56)	111,482 (16.28)	3,735 (0.55)	684,825

TABLE 3-14
 Infrastructure Assessment Summary for Difficult Run Watershed
Fairfax County Stream Physical Assessment

Impact Score	0	1	2	3	4	5	6	7	8	9	10	12	15	18	20	Total
Deficient Buffers	0	0	14	38	90	165	58	70	31	5	3	N/A	N/A	N/A	N/A	474
Crossings	114	172	148	61	47	25	8	6	2	0	1	N/A	N/A	N/A	N/A	584
Ditches and Pipes	197	65	23	26	17	27	4	5	6	0	6	N/A	N/A	N/A	N/A	376
Erosion	0	0	0	0	5	25	24	47	26	5	12	N/A	N/A	N/A	N/A	144
Head Cut	0	0	0	0	4	0	1	0	0	0	1	N/A	N/A	N/A	N/A	6
Obstruction	12	5	9	27	16	32	15	16	17	10	32	N/A	N/A	N/A	N/A	191
Utility	2	1	4	9	10	3	0	4	0	0	3	1	1	1	0	39
Total	325	243	198	161	189	277	110	148	82	20	58	1	1	1	0	1814



- Fairfax County Boundary
- Habitat Rating**
- Excellent
- Good
- Fair
- Poor
- Very Poor
- No Habitat Assessment
- Lakes and Ponds
- Watersheds

**WATERSHED GROUP:
DIFFICULT RUN**

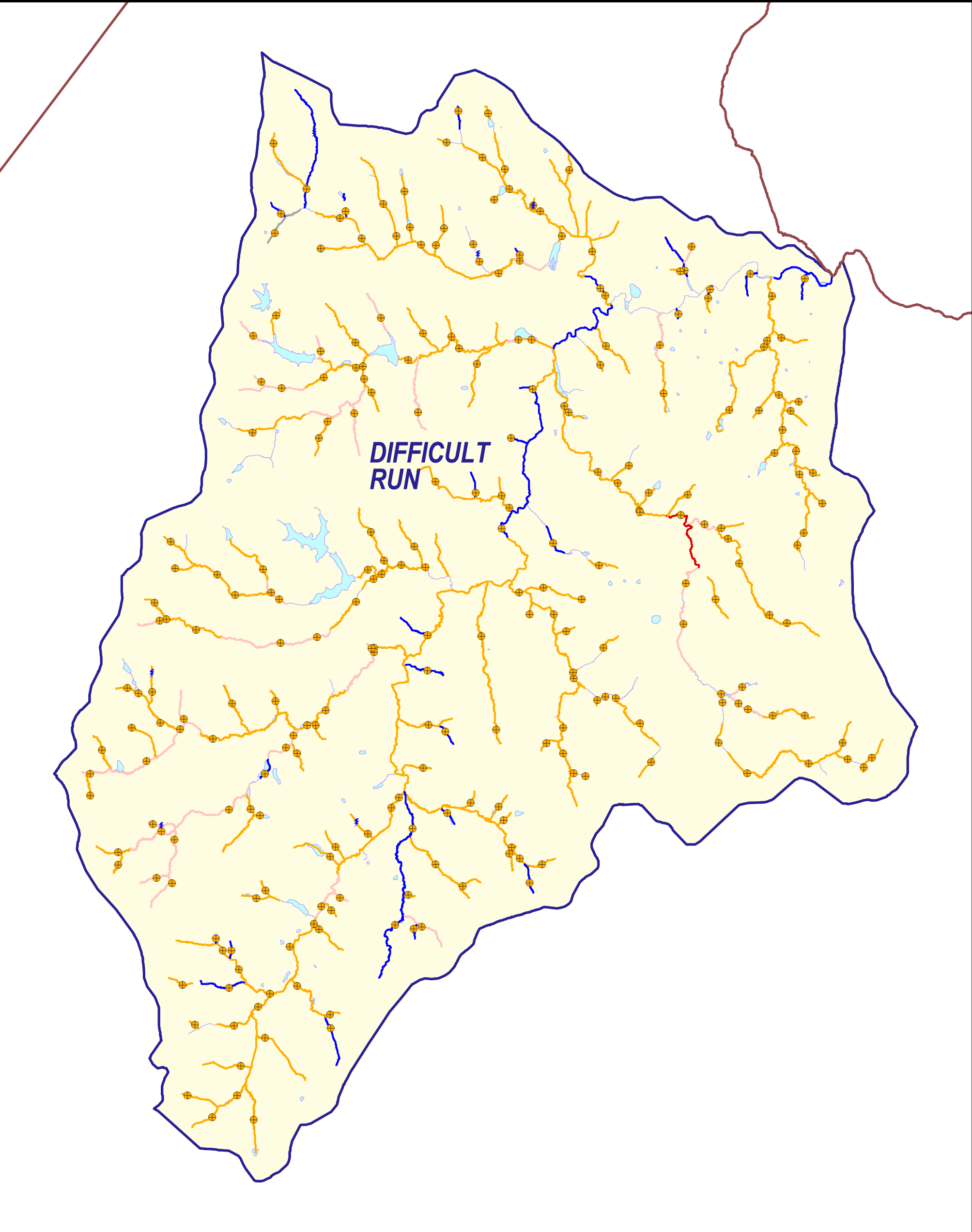


Figure 3-17
Habitat Assessment
Difficult Run
Fairfax County Stream Physical Assessment





0 3000 6000 9000 12000 Feet









Inventory Types

-  Cross Section
-  Head Cut

CEM Stage

-  Not Assigned
-  1
-  2
-  3
-  4
-  5

-  Fairfax County Boundary
-  Lakes and Ponds
-  Streams
-  Watersheds


WATERSHED GROUP:
DIFFICULT RUN

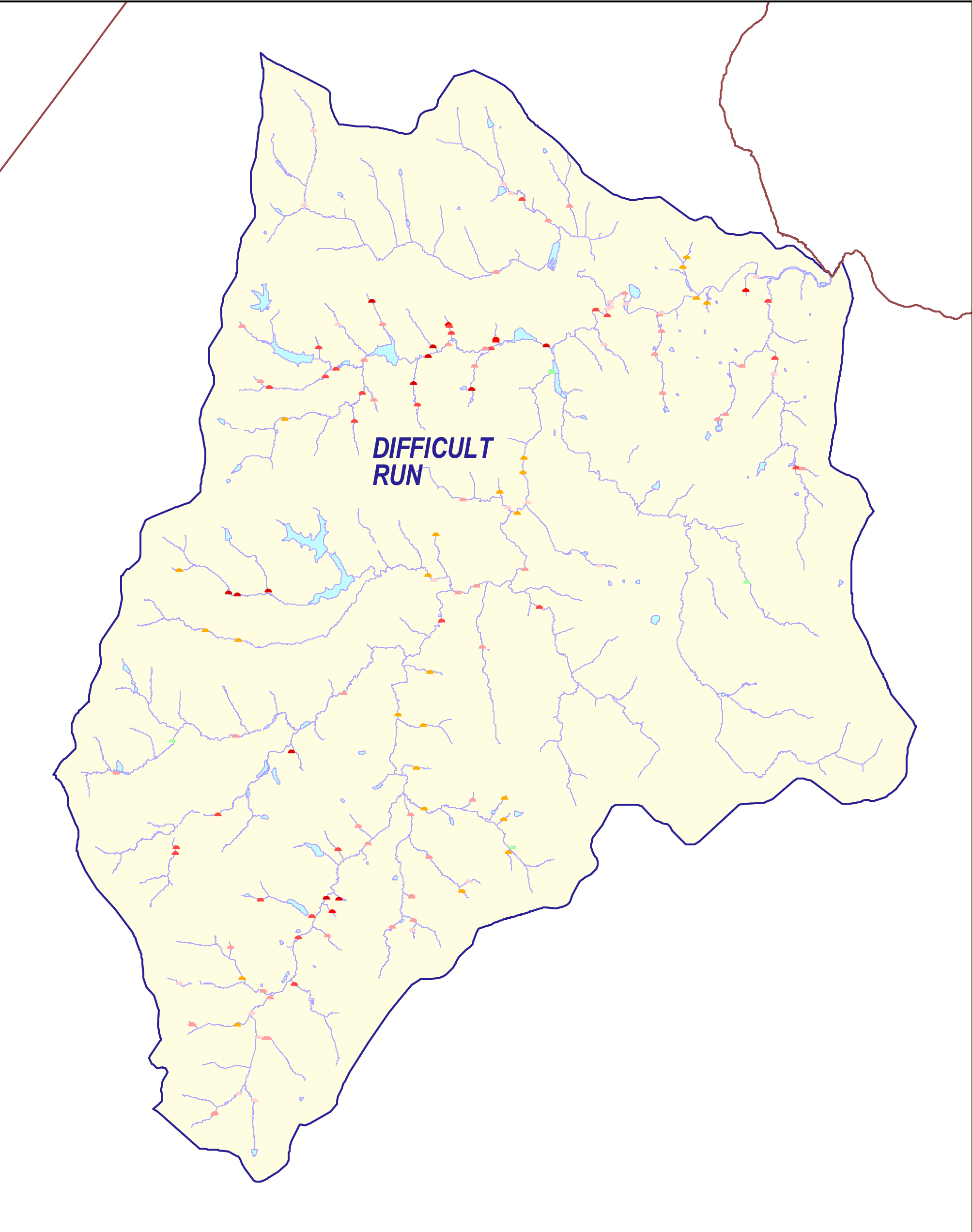


Figure 3-18
CEM Stages
Difficult Run
Fairfax County Stream Physical Assessment



0 3000 6000 9000 12000 Feet





Erosion by Impact Score

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

- Fairfax County Boundary
- Lakes and Ponds
- Streams
- Watersheds

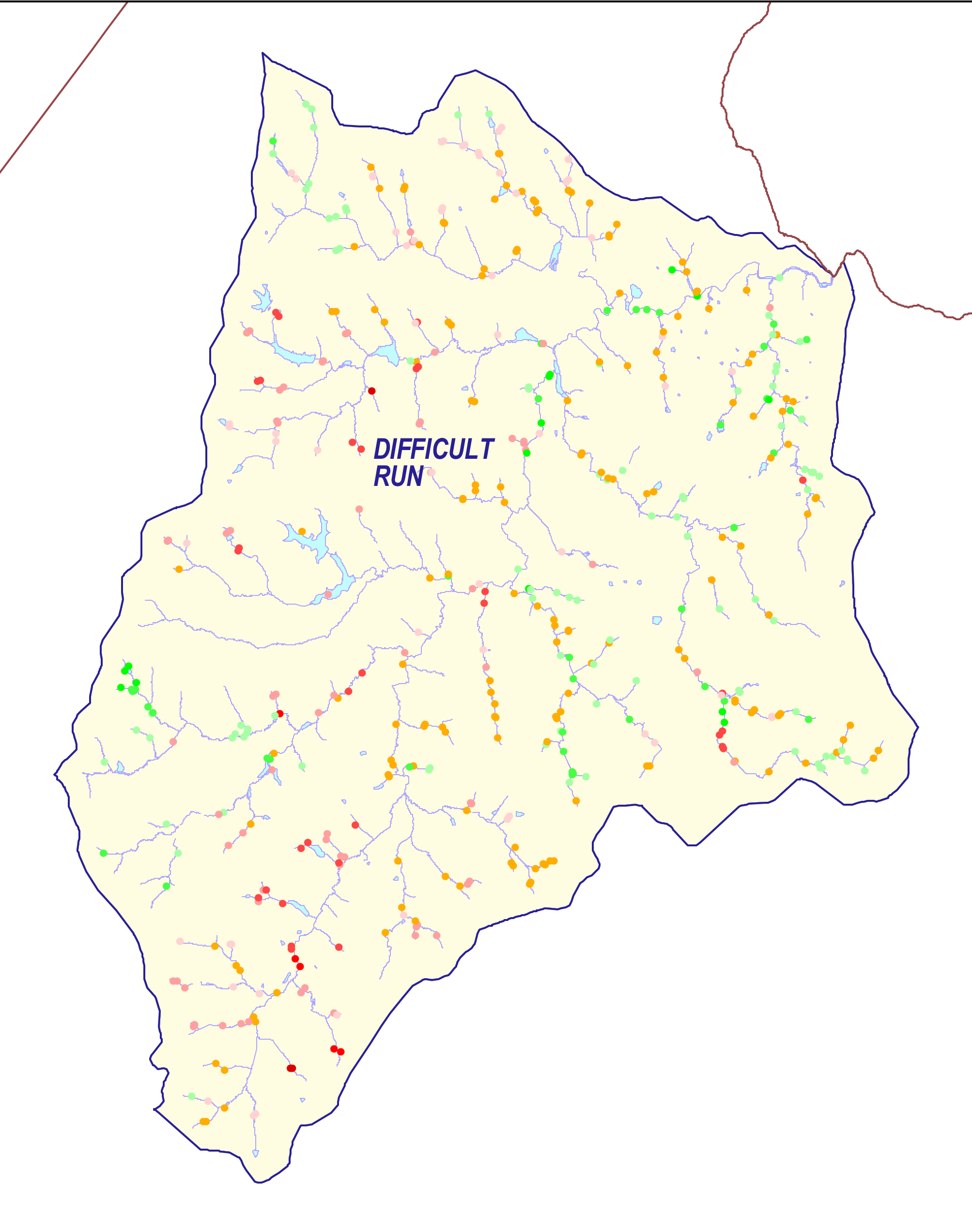
WATERSHED GROUP:
DIFFICULT RUN



0 3000 6000 9000 12000 Feet

Figure 3-19
Erosion Impacts
Difficult Run
Fairfax County Stream Physical Assessment





Deficient Buffer by Impact Score

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

- Fairfax County Boundary
- Lakes and Ponds
- Streams
- Watersheds

WATERSHED GROUP:
DIFFICULT RUN

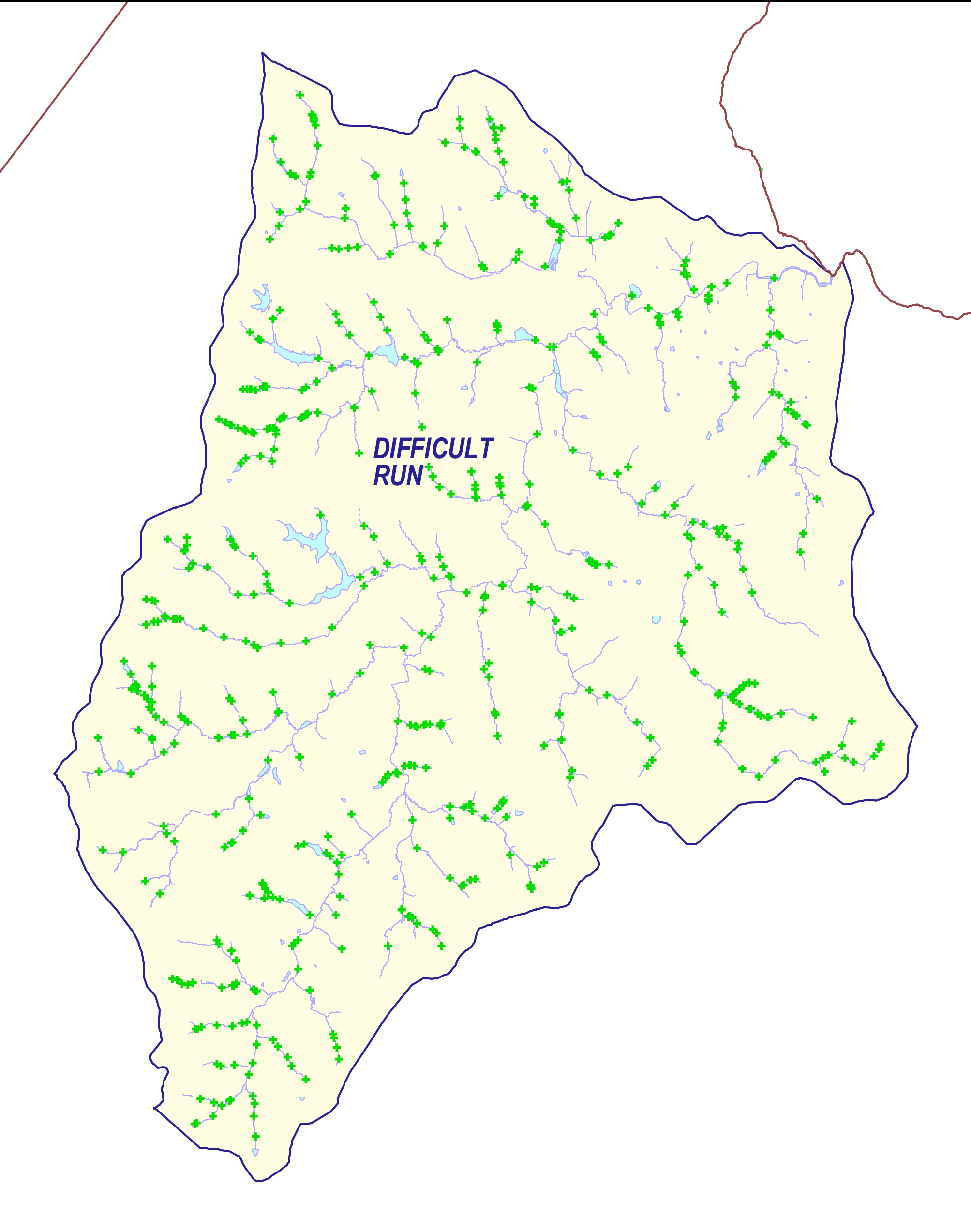


0 3000 6000 9000 12000 Feet

Figure 3-20
Deficient Buffer Impacts
Difficult Run

Fairfax County Stream Physical Assessment





Inventory Type
+ Crossing

- Fairfax County Boundary
- Lakes and Ponds
- Streams
- Watersheds

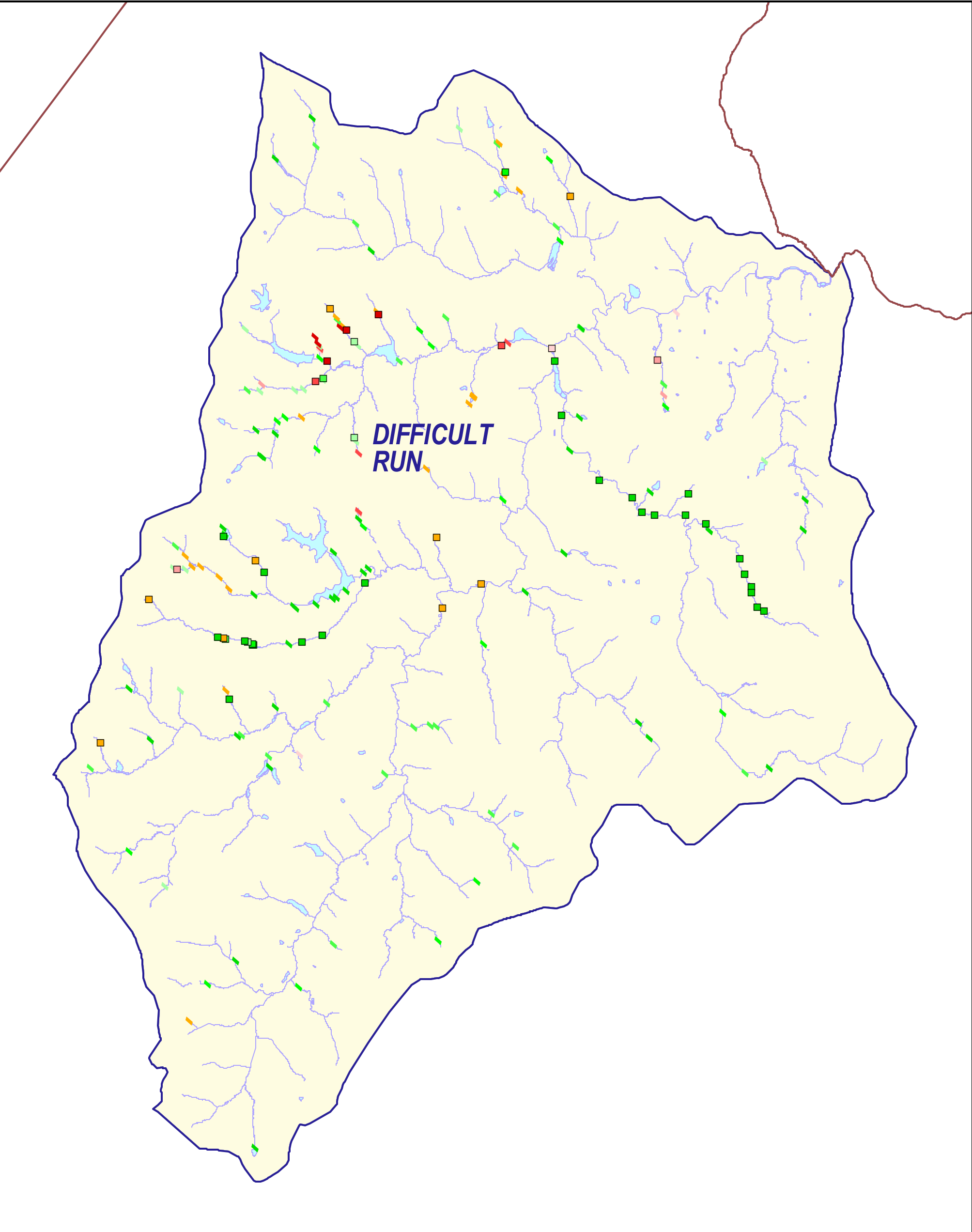
WATERSHED GROUP:
DIFFICULT RUN



0 3000 6000 9000 12000 Feet

Figure 3-21
Crossings
Difficult Run
Fairfax County Stream Physical Assessment





Pipe / Ditch by Impact Score

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

- Fairfax County Boundary
- Lakes and Ponds
- Streams
- Watersheds

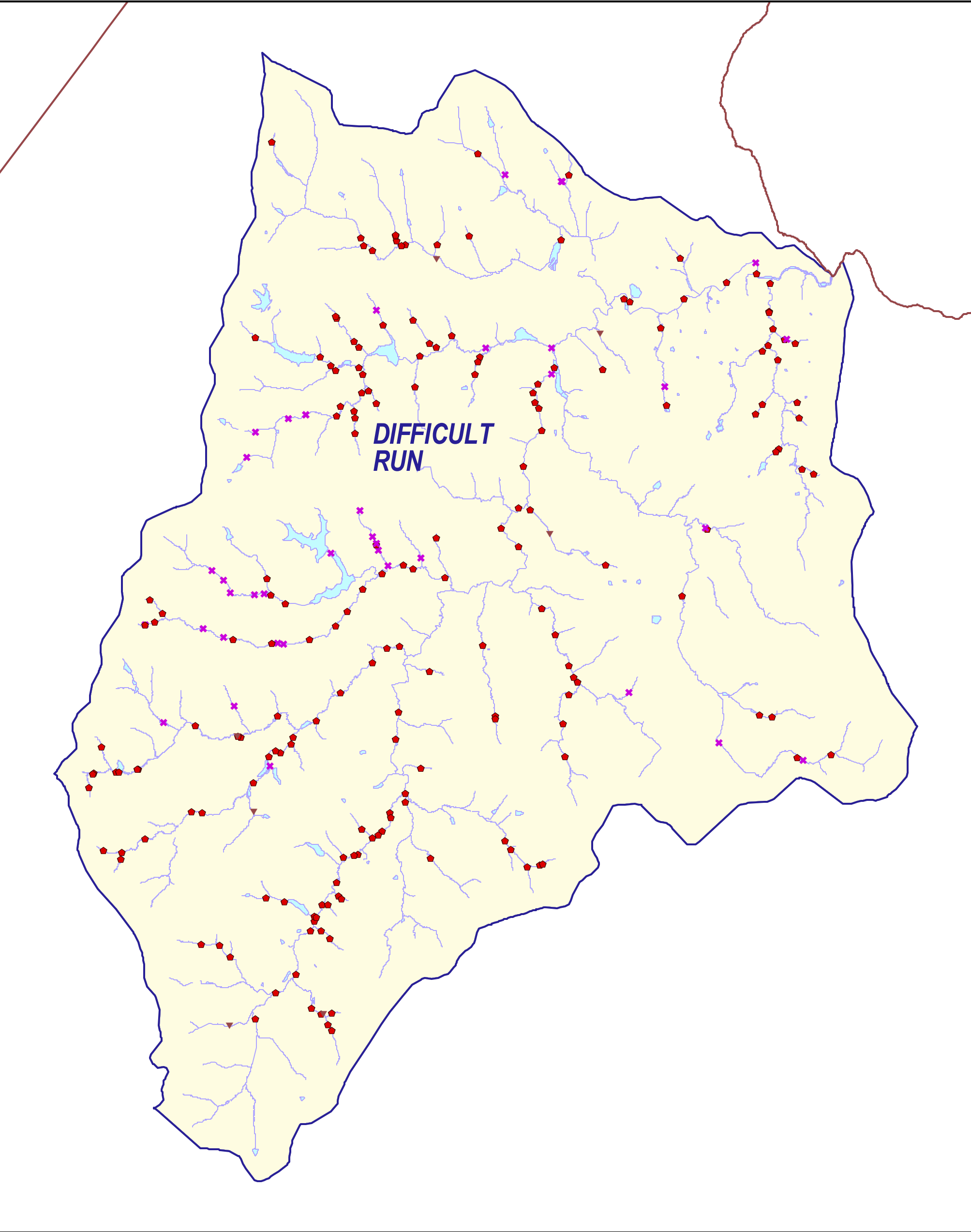
WATERSHED GROUP:
DIFFICULT RUN



0 3000 6000 9000 12000 Feet

Figure 3-22
Pipe and Ditch Impacts
Difficult Run
Fairfax County Stream Physical Assessment





- Inventory Types
- ▼ Dump
 - ◆ Obstruction
 - * Utility
- Legend:
- Fairfax County Boundary
 - Lakes and Ponds
 - Streams
 - Watersheds

WATERSHED GROUP:
DIFFICULT RUN



Figure 3-23
Dumps, Obstructions, and Utilities
Difficult Run
Fairfax County Stream Physical Assessment



0 3000 6000 9000 12000 Feet

